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SPECIAL INTELLIGENCE REPORT 32 (MILITARY-DWINDLE)

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Digest of Report

This report contains information on the early development and use in Germany of machines for intercepting internal Baudot and W/T communications of Russia, and on the establishment and general organization of a branch under German Signal Intelligence for the purpose of intercepting and evaluating Baudot and local radio traffic in Russia. Included are particulars on locations, equipment, personnel, value and types of material intercepted, location of lines checked, and disposition by the Germans of remaining documents after the end of World War II.

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SOURCE

The source of this report is Alex DETTMANN, former chief of the German General Decoding Department on Russia and chief decipherer at the Central Monitoring Station of the German General Headquarters (OKH) in BERLIN in 1939. During the war he was employed as a civilian with the General of Signal Intelligence. He did a great deal of decoding work on the Eastern Front.

REPORT

German Signal Intelligence Branch for Intercepting and Evaluating Internal Communications (Baudot and W/T) of Russia, Particularly Communications Concerning Economic and Industrial Management

By the early thirties, the Chi(Chiffrier) section of the OKW in BERLIN was engaged in research and testing of equipment and machines designed to intercept internal W/T traffic in Russia. Up to the spring of 1939, it handled all matters dealing with signal intelligence, in addition to watching diplomatic, military, and political communications.

(From 1938 to 1943 the chief of the Chi of the OKW was Col KEMPF (fnu), and from 1943 to 1945 Col Hugo KETTLER)

As the use of Baudot communications in the USSR had already been extended, by 1935, to all fields and the number of Baudot lines was constantly increasing, it was important (above all to save personnel) to build machines which could receive electrical impulses and immediately transform them into clear text. In 1936 the firm of Lorenz, BERLIN, which had been given the assignment by the OKW, succeeded in making a machine which transferred up to typewriters the impulse combinations representing respective Russian letters.

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Although constant improvements were made on this machine and a combination machine was constructed which could control up to nine Baudot lines at one time, it was not until 1942 that a proper office for intercepting and watching internal communications in the USSR was established. In the spring of 1939 signal intelligence was reorganized. All military and political matters were placed under the supervision of the OKH. Previously, the chief Listening Post had been overloaded with military and political material because of a lack of specialists and experts, even in military matters. For this reason, watching internal communications seemed of seconday importance, all the more so because the results had not been determined. At that time, too, it was undecided whether economic and industrial matters should be under the Supreme Defense Command or the Army. Furthermore, as was learned from practical experience during peace time, most of the messages set down were of no consequence in line with developments in Baudot communications. It was forgotten or overlooked that Russia was also undergoing a period of development in this respect.

In 1942, a branch for intercepting Baudot communications was established and put under the Signal Intelligence Headquarters, formerly the Central Listening Post. Unfortunately, however, reception conditions were very poor in LOETZEN, East Prussia, where the Signal Intelligence Headquarters was located in 1942, and furthermore the personnel, including operators and evaluators, had been weeded out of higher sections and was hardly suited for determining the real value of watching communications pertaining to matters of industry and economics.

The intercepting and evaluating branch was ordered to control and pick up all audible Baudot communications and to monitor as much local radio traffic as possible. In addition to a large number of army receiving sets such as "Berta" and "Dora", the following equipment was available:

Two nine-lined Baudot sets
Two six-lined Baudot sets
Five double-lined sets

30 to 35% of the intercepted material was of value , 50% of the intercepted material could not be made intelligible because of physical distortion and poor reception. Approximately 15% consisted of private messages dealing with family matters. Messages suitable for evaluating contained mainly the following material:

1. Announcements of various economical and industrial requirements.
2. Announcements concerning completed plans, expressed in percentages.
3. Manufacturing requirements, orders and plans.
4. Training of personnel and specialists (school system).
5. Administrative matters, responsibilities, efficiency, threats of punishment for negligence and nonfulfillment, execution of punishment.
6. Special announcements from the high military command.
7. Coded messages on the General Staff and Front Staff level.

The following Baudot lines were constantly checked in both directions:

BAKU (40°N-49°E) to MOSCOW (55°N-37°E)

KHARKOV (49°N-36 E) to MOSCOW

LENINGRAD (59°N-30°E) to MOSCOW

KUIBYSHEV (53°N-50°E) to MOSCOW

KEMEROVO (55°N-86°E) to BAKU to MOSCOW

ALMA ATA (43°N-76°E) to BAKU to MOSCOW

IPKUTSK (52°N-104°E) to KUIBYSHEV to MOSCOW

SVERDLOVSK (56° N-60°E) to MOSCOW

BAKU and KUIBYSHEV were separate Baudot stations as well as so-called control stations or traffic points.

Local W/T traffic recorded covered the following agencies:

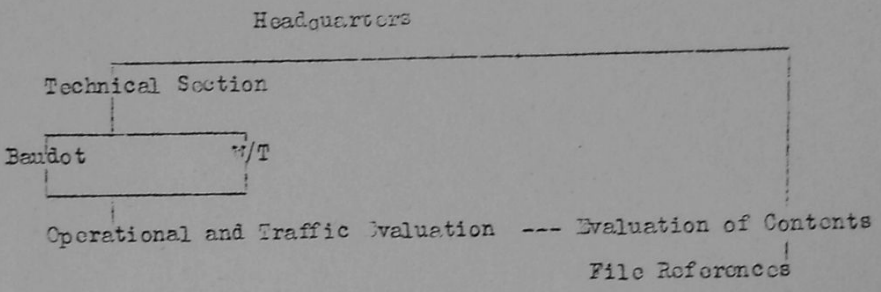
1. NKRF, Peoples Commissariat of Inland shipping matters (mostly clear text).

2. AEROFLOT, civilian air navigation (clear and coded text).

3. Railroad shipments (machine scramble-coded material).

The coded messages of these networks and communication systems were all turned over to the Signal Intelligence Hq, to be worked on. Signal Intelligence was able to decode most of the intercepts.

The general organization of the office was as follows:



In June 1944, in connection with the reorganization of Signal Intelligence Hq, the Baudot intercept office was moved from LOETZEN to ZOSSEN, and in the autumn of the same year it was moved to JUETERBOG because of poor reception conditions in ZOSSEN. In February 1945, for a short time, it was in STUTTGART (Burgholzhof, formerly the stationary listening post of the army), and finally it was in ROSENHEIM, where it was on the day of the capitulation. Reception conditions in LOETZEN and ZOSSEN were bad, in JUETERBOG fair, in STUTTGART good, and in ROSENHEIM ideal.

With the exception of a few specialists, of the chief of the evaluating section and his assistants, and of a few technicians in the technical section, the personnel of the station for intercepting and evaluating internal Baudot and W/T communications was not qualified, consisting mainly of older interpreters who had been considered unusable as decoders in headquarters. The radio operators were for the most part WH's (signal-communications womens auxiliary), completely inexperienced and disinterested in the work. (See personnel list.)

It can be conclusively stated that the possibilities of the intercepting and evaluating branch were not fully utilized. The ease with which important results could have been obtained in unlimited quantities and in the shortest length of time was not recognized, or it was not properly valued. If the Russians now maintain operations in the same fashion, in less than half a year there could be important results in evaluating, if a sufficient number of Baudot receivers are used.

List of Personnel

Section chief	Capt. ROEDER: at present in BERLIN
Head of the technical section, chief operational and traffic evaluator	(T/Sgt) FORCH: at present in STUTTGART-[illegible]

List of Personnel (Cont'd.)

Assistant and chief technician	Uffz (Sgt) HEMPEL: at present with the Lorenz firm in BERLIN.
Second technician	Gefr (Pvt) SSUSCHOWK
Head of the contents evaluating section	(T/Sgt) Wilhelm POPPE, at present in STUTTGART-ZUFFENHAUSEN, Hoordtstr.93.
Assistant	O/Gefn (Cpl) Werner STEIN: at present in STUTTGART.
Interpreters and evaluators	Employees: Jens Herbert KOCH, at present in BAD PYRMONT; HEYER, at present in TRAUNSTEIN; RABENECK, at present in ROSENHEIM; Alex STOLL, at present in WEINHEIM/Bergstr.
Head of card index section and assistant	O/Gefr (Cpl) Hans WALDMANN, at present in JENA; Employee, SCHAMARDIN, at present in STUTTGART.

Employed as radio operators were monitoring technicians of the army and, for a short time, trained NH's (womens auxiliary of the signal-communications).

Supplement (Documents and equipment)

At the time of the German capitulation, the office for intercepting and evaluating internal Russian communications, which was then located in Upper Bavaria, together with all undestroyed technical equipment, was turned over to the American forces. All reference materials, with the exception of the last yearly report on evaluations, were burned. The technical equipment, together with the first and second technicians HEMPEL and SSUSCHOWK as PWs, were taken to England.

POPPE, the head of the evaluating section, who had been released from prison, gave the yearly report to his assistant STEIN, for transmission to the proper American authorities. POPPE felt that STEIN would be in a better position to do so because STEIN's wife was British-born and was already working for the US Army at that time. POPPE gave the papers to STEIN in the presence of an American major. Sometime during the beginning of 1946, STEIN supposedly turned the report over to Mr. MURPHY, of the Office of the Political Advisor to Gen CLAY.

Several months later STEIN was visited by two US army officers who questioned him about the whereabouts of the card index of his former organization. STEIN stated that WALDMANN had charge of the card index and that he knew nothing further about it.

According to POPPE, the card index was burned with the other documents. POPPE stated that the index was badly kept and is now completely outdated.

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